Claims

- 1. Matrix for transdermal administering of rotigotine [(-)-5,6,7,8-tetrahydro-6-[propyl [2-(2-thienyl)ethyl]amino]-1-naphtol], containing a matrix polymer supersaturated with rotigotine base, characterized in that the portion of the rotigotine not dissolved in the matrix polymer is dispersed in the matrix polymer as amorphous particles with a maximum mean diameter of 30 μm and the matrix is free of solvents, crystallization inhibitors and dispergents.
- 2. Matrix for transdermal administering of rotigotine [(-)-5,6,7,8-tetrahydro-6-[propyl [2-(2-thienyl)ethyl] amino]-1-naphtol], consisting of
 - (a) matrix polymer,
 - (b) rotigotine base in a concentration above the solubility limit of the matrix polymer, wherein the portion of the rotigotine not dissolved in the matrix polymer is dispersed in the matrix polymer as amorphous particles with a maximum mean diameter of 30 μ m and
 - (c) optionally one or more antioxidants.
- 3. Matrix according to one of the preceding claims, wherein the matrix polymer is a amino-resistant silicon or a mixture of amino-resistant silicons.
- Matrix according to one of the preceding claims, characterized in that the matrix is self-adhesive.
- 5. Matrix according to one of the preceding claims, characterized in that the matrix consists of
 - (a) 60-95 weight percent of an amino-resistant silicon or an amino-resistant silicon mixture,
 - (b) 5-40 weight percent amorphous rotigotine base dispersed in the silicon and
 - (c) 0-2 weight percent antioxidant.

- 6. Planiform system for transdermal administering of rotigotine, containing a matrix according to one of the preceding claims and a backing impermeable to rotigotine.
- 7. Planiform system according to claim 5, characterized in that the rotigotine charge is between 0.3 and 6 mg/cm².
- 8. Use of a system or a matrix according to one of the preceding claims to produce a drug to treat Morbus Parkinson or Restless Leg Syndrome.
- Use of a system or a matrix according to one of the preceding claims to produce a drug to treat depression.
- 10. Method for producing a pharmaceutical matrix for transdermal administering of rotigotine, characterized by the consecutive steps:
 - (a) dissolving matrix polymer in a solvent,
 - (b) adding rotigotine base in crystalline form in a quantity above the solubility limit of the matrix polymer used in (a),
 - (c) removing the solvent and heating the matrix mass produced to a temperature of at least 74 °C until the rotigotine has melted,
 - (d) cooling the matrix mass.
- 11. Method according to claim 10, wherein the polymer mass supersaturated with rotigotine created in step (b) is applied on a foil impermeable to rotigotine and then, as described in steps (c) and (d) of claim 10, is further treated.

WO 2004/058247 20 PCT/EP2003/014902

12. Method according to one of the preceding claims, characterized in that the matrix polymer has a solubility for rotigotine of <3 weight percent.

- 13. Method according to one of the preceding claims, characterized in that the matrix polymer is an amino-resistant silicon.
- 14. Method according to one of the preceding claims, characterized in that the matrix polymer is an amino-resistant silicon contact adhesive or a mixture of several amino-resistant silicon contact adhesives.